

# A comparative study to assess the knowledge regarding stroke, its risk factors and prevention among cardiac patients with and without stroke attending CN center AIIMS New Delhi

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## ABSTRACT:

**Introduction:** Stroke is the second commonest cause of death after coronary heart disease. Prevention is the primary treatment approach aimed at reducing the morbidity and mortality related to stroke, and adequate treatment, control of risk factors, and lifestyle changes can prevent up to 50% of strokes.

**Objectives:** To assess the knowledge regarding stroke, its risk factors and prevention, to compare the knowledge regarding stroke among cardiac patients with stroke and without stroke and to find the association of their knowledge with selected variable.

**Material and methods:** Quantitative descriptive, comparative cross sectional survey was conducted on the cardiac patients with and without stroke in department of neurology and cardiology, AIIMS. The total sample size was 220. Data were analyzed at a statistical significance level of  $p < 0.05$ .

**Result:** Among both the groups, significant statistical difference was found in terms of residence of area ( $p=0.02$ ), occupation ( $p=0.05$ ), habits ( $p=0.01$ ), patient history of illness (HTN) ( $P=0.001$ ), CAD (0.01) RHD (0.01) There was a significant difference between total knowledge scores in both groups, with cardiac patients with stroke having more knowledge than the cardiac patients without stroke. Mean difference was 3.51. This was statistically significant ( $p=0.01$ ) at 0.05 level of significant.

**Conclusion:** Knowledge regarding stroke, its risk factor and prevention was significantly higher in cardiac patients with stroke as compared to cardiac patients without stroke. There is an intent need to educate the cardiac patients at risk for stroke regarding risk factors and prevention as patients with diseases like hypertension and RHD form a sizable population of stroke patients. Education given to patients about various aspects of stroke and life style change will help them to reduce the risk or co-morbidity of stroke.

**Key word:** Assess, Knowledge, Stroke

## INTRODUCTION

Stroke is one of life related disease and is a global health problem. It is the second commonest cause of death after coronary heart disease. About **140,000** Americans die each year due to stroke. When measured individually from other diseases, stroke is fifth leading cause of death, behind diseases of the heart, cancer, chronic lower respiratory disease, and inadvertent injuries/accidents.(1,2). Prevention is the primary treatment approach aimed at reducing the morbidity and mortality related to stroke, and adequate treatment, control of risk factors, and lifestyle changes can prevent up to 50% of strokes(5)80% of stroke are ischemic and are preventable. In India many centres have started recombinant tissue plasminogen and activators(rtPA) therapy for treatment of ischemic stroke. It is mostly accepted that patients should be administered rtPA within 3-4.5 hours after onset of stroke. It helps in

Reducing the disability and effect of stroke. The drug effectiveness and safety depend on time. But most of the patients do not reach hospital in time because poor of knowledge regarding the warning sign of stroke.<sup>6</sup>

## PROBLEM STATEMENT

A comparative study to assess the knowledge regarding stroke, its risk factors and prevention among the cardiac patients with and without stroke attending CN center, AIIMS.

## OBJECTIVE OF STUDY

1. To assess the knowledge regarding stroke, its risk factors and prevention among cardiac patients with and without stroke.
2. To compare the level of knowledge regarding stroke, its risk factors and prevention of stroke between cardiac patients with and without stroke.
3. To find out the association between cardiac patients

with and without stroke with selected demographic variables.

## **MATERIAL AND METHOD RESEARCH DESIGN**

The research design in cooperates the most important methodology decisions that a researcher make in conducting a research study the research design guide the researcher in planning and implementing the study in a way that is most likely to achieve the our research design is non experiment design to as the knowledge stroke and its risk factor or prevention.

### **RESEARCH SETTING**

It is the physical location & condition in which data collection takes a place in a study. The setting of the study is in OPD and IPD areas of CN tower AIIMS New Delhi.

### **ACCESSIBLE POPULATION**

1. Patients having history of stroke due to cardiac reasons admitted in neurology wards or registered in neurology OPD at CN Centre, AIIMS, New Delhi.
2. Cardiac patients with no history of stroke admitted in cardiology wards or registered in cardiology OPD at CN Centre, AIIMS, New Delhi.

**Sample size:** Established sample size was 220(110in each group)

#### **Sampling technique**

Convenience sampling is the type of non probability sample technique.

### **INCLUSION CRITERIA**

For cardiac patient with stroke

**Major finding and discussion**

The mean total knowledge score in cardiac patient with stroke and cardiac patient without stroke was  $(24.57 \pm 4.3)$  and  $(21.05 \pm 3.00)$  respectively. The mean score in different domains like general information, risk factors and prevention  $(15.0 \pm 3.0)$ ,  $(2.90 \pm 1.05)$  and  $(6.68 \pm 1.70)$  and in cardiac patient without stroke  $(12.79 \pm 2.55)$ ,  $(2.57 \pm 1.17)$  and  $(5.71 \pm 1.84)$  respectively.

There was a significant difference between total knowledge score in both groups. Mean difference was 3.51, which was statistically significant ( $p=0.008$ ) at 0.05 level of significance.

**IMPLICATIONS****Nursing practice**

## INTRODUCTION

The Indian Police Service, is one of the three All India Services of the Government of India. In 1948, a year after India gained independence from Britain, the Indian Police was replaced by the Indian Police Services.<sup>1</sup> Highway Police and Traffic police in small towns come under the state police, but traffic police in the cities come Under the metropolitan police. The traffic police are responsible for maintaining the smooth flow of traffic and stopping offenders in the city or town, whilst the highway police are responsible for securing the highways and for catching speeding offenders.<sup>2</sup>

In order to study the health hazards of traffic pollution on human systems, like respiratory and hearing problems the section of the population considered most

suitable for study was the traffic policemen who are posted at various traffic junctions through which maximum number of vehicles pass.

Air, noise, heat, radiation etc are the main sites of environment pollution and this is more so in urban areas. Occupational environment too plays a major role on the health of the exposed. The health hazards get more severe when the duration of exposure increases. This fact is more important in situations as the personnel engaged in traffic duty. These personnel have to undergo physical and mental strain in an environment polluted by